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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,312	04/18/2006	Johannus Leopoldus Bakx	NL031238US1	9405

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EXAMINER

SIMPSON, LIXI CHOW

ART UNIT	PAPER NUMBER
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2627

NOTIFICATION DATE	DELIVERY MODE
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12/16/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/576,312	Applicant(s) BAKX, JOHANNUS LEOPOLDUS	
	Examiner LIXI C. SIMPSON	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-5 and 8-17 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-5 and 8-17 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/23/10 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-5, 8-14 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the first light source" in line 20. There is insufficient antecedent basis for this limitation in the claim.

Claims 2-5, 8-14 and 16 are rejected because they depend from claim 1.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 8, 12 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Buchler et al. (US 2002/0009041; hereafter Buchler).

Regarding claim 1:

Buchler discloses an optical detector system (see Fig. 1) comprising a first and a second optical detector units for receiving light generated from a first and second lasers (see Fig. 1, elements 10 and 20; also see paragraph [0013]; the system is capable of writing/reading data to/from a CD and DVD; the CD and DVD inherently uses two different lasers), respectively, each optical detector unit comprising an array of detector segments and at least one respective output terminal defining a current output of each corresponding optical detector unit (see Fig. 1); and

a signal processing circuit (see Fig. 1, element 2);

wherein at least one current output of the first optical detector unit is connected directly at a common current output node to the corresponding current output of the second optical detector unit, said common current output node being directly connected to a processing terminal of the signal processing circuit so that the processing terminal is directly connected to both corresponding current output of the first optical detector unit and the corresponding current output of the second optical detector unit through the common current output node (see Fig. 1 and paragraph [0005]), and

wherein, when the first light source is in use, only the first optical detector unit is operative, and the second optical detector unit is non-operative by virtue of not receiving light from a second laser, so that, an output of the second optical detector unit is floating and does not affects output signals produced by the first optical detector unit (see paragraphs [0020]-[0021]).

Regarding claim 2:

Buchler discloses the optical detector system according to claim 1, wherein the two optical detector units are of mutually identical design (see Fig. 1 and paragraph [0019]).

Regarding claim 3:

Buchler discloses the optical detector system according to claim 2, wherein the two optical detector units have mutually different wavelength sensitivity ranges (see paragraph [0013]; the two optical detector units inherently have mutually different wavelength sensitivity ranges because one is for detecting light for reading/writing a CD and the other one is for detecting light for reading/writing a DVD).

Regarding claim 4:

Buchler discloses the optical detector system according to claim 2, wherein each of the first and second optical detector units have multiple current outputs and each current output of the first optical detector unit is connected directly to the corresponding current output of the second optical detector unit at a corresponding output node (see Fig. 1).

Regarding claim 5:

Buchler discloses the optical detector system according to claim 1, wherein the second optical detector unit in the non-operative state presents a high input impedance (see paragraph [0021]).

Regarding claim 8:

Buchler discloses the optical detector system according to claim 1, wherein the signal processing circuit has at least one input terminal connected via a conductor to a

corresponding output node of the optical detector system, and wherein said at least one input terminal comprises a current input (see Fig. 1, lines 31-38 are being input into the signal processing circuit 2).

Regarding claim 12:

Buchler discloses an optical system for a disc drive apparatus, comprising:

light beam generating means for generating at least two light beams (see paragraph [0013];

optical components for directing and focusing the two light beams in a focal spot on an optical disc (the device of Buchler inherently includes optical component for directing and focusing lights in order to write/read data to/from CD and DVD);

an optical detector system according to claim 1 (see claim 1 above);

optical components for directing reflected light beams to respective optical detector units of the optical detector system (the device of Buchler inherently includes optical components for directing reflected lights in order to direct the lights into the corresponding optical detectors 10 and 20).

Regarding claims 15-17:

Claims 15-17 recite similar limitations as claims 1 and 12; hence, Buchler discloses all the features in claims 15-17.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buchler in view of Lys et al. (US 2003/0100837; hereafter Lys).

Regarding claim 9:

Buchler does not show the optical detector system includes a terminator resistor. However, it is well known in the art to include a terminator resistor in a line of a device. For example, Lys discloses an optical detector system, wherein the signal processing circuit has at least one input terminal connected via a conductor to a corresponding output node of the optical detector system, and wherein said at least one input terminal comprises a voltage input, and wherein a terminator resistor is connected to said line (see Fig. 6 and paragraph [0018]).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to connect a terminator resistor to the line in the optical detector system of Buchler. One of ordinary skill in the art would have been motivated to do this because terminator resistor reduces the possibility of signal reflection (see paragraph [0018]).

Regarding claim 10:

Lys discloses the optical detector system according to claim 9, wherein said terminator resistor is arranged in the proximity of said signal processing circuit (see paragraph [0018]).

Regarding claim 11:

Lys does not show that the terminator resistor is integrated in an IC implementing said signal processing circuit. However, Examiner takes Official Notice that integrating multiple electronic components in an IC implementation is well known in the art. One of

ordinary skill in the art would have been motivated to integrate the terminator resistor in an IC implementing the signal processor circuit because the size of the circuit can be reduced.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buchler in view of Oshima (US 6,445,670).

Regarding claim 13:

Buchler discloses all the features in claims 1 and 12; however, Buchler does not show that the optical components is arranged such that light beams have at least common light paths.

However, Oshima discloses an optical detector system comprising optical components arranged such that light beams have at least partly common light paths (see Fig. 6).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the system of Buchler to arrange the optical components in a way that the light beams have partly common light paths as taught by Oshima. One of ordinary skill in the art would have been motivated to do this because design choice.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buchler in view of Kaiho et al. (US 2003/0185136; hereafter Kaiho).

Buchler discloses all the features in claims 1 and 12; however, Buchler does not show that the optical components is arranged such that light beams have completely separate light paths.

However, Kaiho discloses an optical detector system comprising optical components arranged such that light beams have completely separate light paths (see Fig. 3).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the system of Buchler to arrange the optical components in a way that the light beams have completely separate light paths taught by Kaiho. One of ordinary skill in the art would have been motivated to do this because design choice.

Response to Arguments

10. Applicant's arguments with respect to claims 1 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIXI C. SIMPSON whose telephone number is (571)272-7571. The examiner can normally be reached on Mon-Fri, 8:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LIXI C SIMPSON/
Primary Examiner, Art Unit 2627

